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| Project | **Interfacing Cyber and Physical World Working Group**  <<https://sagroups.ieee.org/2888/> **>** |
| Title | **Proposal of New PAR for Virtual Object Visualization** |
| DCN | **2888-21-0020-00-0000** |
| Date Submitted | **June 18, 2021** |
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| Re: |  |
| Abstract | This document is written in the form of the context required for the proposal of a new PAR. |
| Purpose | This document was submitted to propose a new PAR. |
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**PAR for a New IEEE Standard**

# Section 1

* 1. **Assigned Project Number**:

P2888.5

* 1. **Type of Document: *Standard, Recommended Practice, or Guide***

Standard

* 1. **Life Cycle: *Full Use or Trial Use***

Full Use.

# Section 2

**2.1 Project Title:**

Virtual Object Visualization

# Section 3

**3.1 Working Group: Interfacing cyber and physical world**

**3.2 Sponsoring Society and Committee:** C/SAB

[A listing of Sponsor P&Ps and Sponsor Scopes is available at <https://development.standards.ieee.org/pub/view-sponsor-pnps>]

**3.3 Joint Sponsor:** (chosen from drop down menu)

If you are not adding a joint sponsor to this project, you may leave this field blank.

# Section 4

**4.1 Sponsor Balloting Information: *Individual or Entity***

Individual

**4.2 Expected Date of Submission of Draft to the IEEE-SA for Initial Sponsor Ballot**

**Month: Oct. Year: 2024**

**4.3 Projected Completion Date for Submittal to RevCom**

**Month: Dec. Year: 2023**

# Section 5

**5.1 Approximate number of people expected to be actively involved in the development of this project:**

30

**5.2 Scope of the proposed standard:**

This standard seeks to define various visualization methods used on how objects that exist in the Physical World are represented in the Cyber World. These methods may include displaying the virtual object on the general display screen or as a hologram.

**5.3 Is the completion of this standard contingent upon the completion of another standard? No**

**5.4 Will this document contain a Purpose clause? No**

**5.5 Need for the project:**

IEEE 2888.1 defines the sensor for expressing the physical world, and IEEE 2888.2 defines the content for expressing the change that occurred in the cyber world in the physical world. And IEEE 2888.3 deals with the definition of synchronization between sensor and actuator. However, expressing the Physical World in the Cyber World is not defined. This information has to be contained for Digital Virtualization which is pursued by IEEE 2888 to secure the completeness.

**5.6 Stakeholders for the standard:**

Manufacturers, Local Governments, Constructors, Real-Estate Developers, etc.

# Section 6

**6.1 Intellectual Property:**

**A. Is the Sponsor aware of any copyright permissions needed for this project? *No***

**B. Is the Sponsor aware of possible registration activity related to this project? *No***

# Section 7

**7.1 Are there other standards or projects with a similar scope? *No***

**7.2 Joint Development - Is it the intent to develop this document jointly with another organization? *No***

**7.3 International Standards Activities**

**A. Adoptions - Is there potential for this standard to be adopted by another organization?: *No***

**B. Harmonization - Are you aware of another organization that may be interested in portions of this document in their standardization development efforts? No**

**7.4 Does the sponsor foresee a longer term need for testing and/or certification services to assure conformity to the standard? *Yes***

**Additionally, is it anticipated that testing methodologies will be specified in the standard to assure consistency in evaluating conformance to the criteria specified in the standard? *No***

# Section 8

**8.1 Additional Explanatory Notes:**

**8.2 IEEE Code of Ethics**

**I acknowledge that I have read and I understand the** [**IEEE Code of Ethics**](http://www.ieee.org/portal/pages/iportals/aboutus/ethics/code.html)

**I agree to conduct myself in a manner that adheres to the IEEE Code of Ethics when engaged in official IEEE business.**